STATE OF MISSOURI

DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION



MISSOURI STATE OPERATING PERMIT

In compliance with the Missouri Clean Water Law, (Chapter 644 R.S. Mo. as amended, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 92nd Congress) as amended,

MO-0118672

Permit No.

August 3, 2011

Expiration Date MO 780-0041 (10-93)

Owner: Address:	Boone County Regional Sewer District 1314 North 7 th Street, Columbia, MO 65201				
Continuing Authority: Address:	Same as above Same as above				
Facility Name: Address:	BCSD, Shaw WWTF St. Charles Road, Columbia, MO 65201				
Legal Description: Latitude/Longitude:	SW ¹ / ₄ , NW ¹ / ₄ , SW ¹ / ₄ , Sec 1, T48N, R12W; Boone County +3858040/ -09213285				
Receiving Stream: First Classified Stream and ID: USGS Basin & Sub-watershed No.:	North Fork Grindstone Creek (U) North Fork Grindstone Creek (C) (01010) (10300102 – 120002)				
is authorized to discharge from the faci as set forth herein:	ility described herein, in accordance with the effluent limitations and monitoring requirements				
Design population equivalent is 500. Design flow is 50,000 gallons per day.	ge is hauled to the Columbia Regional WWTF. Actual flow is 2,000 gallons per day. ns/year. Actual sludge production is 0.33 dry tons/ year.				
	r discharges under the Missouri Clean Water Law and the National Pollutant Discharge to other regulated areas. This permit may be appealed in accordance with Section 644.051.6 of				
August 4, 2006 Effective Date	Doyle Childers, Director, Department of Natural Resources Executive Secretary, Clean Water Commission				

G. Irene Crawford, Director, Northeast Regional Office

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A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

PERMIT NUMBER MO-0118672

The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective upon issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:

OTHER TIT MANAGED AND EDGE HEAT		FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Outfall #001						
Flow	MGD	*		*	Once/ month	24 hr est.
Temperature	$^{\circ}\mathrm{C}$	*		*	Once/ month	grab
Biochemical Oxygen Demand ₅ **	mg/L		45	30	Once/ month	Composite***
Total Suspended Solids**	mg/L		45	30	Once/ month	Composite***
pH – Units	SU	****		****	Once/ month	grab
Ammonia as N	mg/L	*		*	Once/ month	grab

MONITORING REPORTS SHALL BE SUBMITTED <u>MONTHLY</u>; THE FIRST REPORT IS DUE <u>September 28, 2006</u>. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

B. STANDARD CONDITIONS

IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED <u>Parts I & III</u> STANDARD CONDITIONS DATED <u>October 1, 1980 and August 15, 1994</u>, AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.

MO 780-0010 (8/91)

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

- * Monitoring requirement only.
- ** This facility is required to meet a removal efficiency of 85% or more.
- *** A composite sample made up from a minimum of four grab samples collected within a 24-hour period with a minimum of two hours between each grab sample.
- **** pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.0-9.0 pH units.

C. SPECIAL CONDITIONS

- 1. This permit may be reopened and modified, or alternatively revoked and reissued, to:
 - (a) Comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
 - (1) contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
 - (2) controls any pollutant not limited in the permit.
 - (b) Incorporate new or modified effluent limitations or other conditions, if the result of a waste load allocation study, toxicity test or other information indicates changes are necessary to assure compliance with Missouri's Water Quality Standards.
 - (c) Incorporate new or modified effluent limitations or other conditions if, as the result of a watershed analysis, a Total Maximum Daily Load (TMDL) limitation is developed for the receiving waters which are currently included in Missouri's list of waters of the state not fully achieving the state's water quality standards, also called the 303(d) list.

The permit as modified or reissued under this paragraph shall also contain any other requirements of the Clean Water Act then applicable.

- 2. All outfalls must be clearly marked in the field.
- 3. Permittee will cease discharge by connection to areawide wastewater treatment system within 90 days of notice of its availability.

4. Changes in Discharges of Toxic Substances

The permittee shall notify the Director as soon as it knows or has reason to believe:

- (a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"
 - (1) One hundred micrograms per liter (100 µg/L);
 - (2) Two hundred micrograms per liter (200 μ g/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 μ g/L) for 2,5 dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
 - (3) Five (5) times the maximum concentration value reported for the pollutant in the permit application;
 - (4) The level established in Part A of the permit by the Director.
- (b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant, which was not reported in the permit application.
- 5. Report as no-discharge when a discharge does not occur during the report period.

6. Water Quality Standards

- (a) Discharges to waters of the state shall not cause a violation of water quality standards rule under 10 CSR 20-7.031, including both specific and general criteria.
- (b) General Criteria. The following general water quality criteria shall be applicable to all waters of the state at all times including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:
 - (1) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses;
 - (2) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses:
 - (3) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
 - (4) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;
 - (5) There shall be no significant human health hazard from incidental contact with the water;
 - (6) There shall be no acute toxicity to livestock or wildlife watering;
 - (7) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
 - (8) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.
- 7. Sludge and Biosolids Use For Domestic Wastewater Treatment Facilities
 - (a) Permittee shall comply with the pollutant limitations, monitoring, reporting, and other requirements in accordance with the attached permit Standard Conditions.
 - (b) If sludge is not removed by a contract hauler, permittee is authorized to land apply biosolids. Permit Standard Conditions, Part III shall apply to the land application of biosolids. Permittee shall notify the department at least 180 days prior to the planned removal of biosolids. The department may require submittal of a biosolids management plan for department review and approval as determined appropriate on a case-by-case basis

Date of Fact Sheet: May 10, 2006

Date of Public Notice: June 16, 2006

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT FACT SHEET

This Fact Sheet explains the applicable regulations, rationale for development of this permit and the public participation process.

NPDES PERMIT NUMBER: MO-0118672

FACILITY NAME: BCSD, Shaw WWTF

OWNER NAME: Boone County Regional Sewer District

LOCATION: SW¹/₄, NW¹/₄, Sw¹/₄, Sec 1, T48N, R12W; Boone County

RECEIVING STREAM: North Fork Grindstone Creek

FACILITY CONTACT PERSON: Dwayne Cooksey (Operations Manager) TELEPHONE: (573) 441 - 0098

FACILITY DESCRIPTION AND RATIONALE

This facility provides secondary treatment to the wastewater discharge with extended aeration and a sludge holding tank. Sludge is hauled to the Columbia Regional Wastewater Treatment Facility. The discharge reports to an unclassified section of the North Fork Grindstone Creek, then 3.5 miles downstream to a class "C" section of North Fork Grindstone Creek. Standard technology-based limits as stated in 10 CSR 20-7.015 (8) 1. and 2. for BOD₅, TSS and pH are believed adequate to protect the receiving stream. Ammonia and temperature have been added as monitoring requirements to determine if there is "reasonable potential" to violate state water quality standards for those parameters. The permit should contain a reopener clause should the data generated by this permit, or other monitoring data, indicate that state water quality standards are being exceeded, due at least in part, to this discharge.

This permit will be issued for a period of <u>five</u> years.